

**REMARKS/ARGUMENTS**

As noted above, upon entry of this reply, claims 1-44 will remain pending.

Claims 1-29 are original patent claims.

Claims 30-44 have been added in the present reissue application.

Claims 9, 16 and 24 are amended herein to correct typographical errors in the printed patent.

Reconsideration and allowance of the application are respectfully requested.

**Discussion Of Amendment To The Specification**

The specification has been amended herein, at column 3, lines 25-48, to more accurately include the English translation of the paragraph according to the International Application, i.e., PCT/JP97/02265, of which Application No. 09/214,001 which matured into U.S. Patent No.6,413,479 (hereinafter "the '479 patent") is the U.S. national stage. Accordingly, this amendment to include "outward" should not be considered to constitute new matter.

Moreover, the specification has been amended herein, at column 14, lines 30-40 to correct a typographical error by changing "hte" to ---the---.

**Disclosure Statement**

Applicants express appreciation for the inclusion with the Office Action of the initialed Form PTO-1449, whereby the Examiner=s consideration of the Information Disclosure Statement, filed February 26, 2004, is of record.

**Foreign Priority**

Applicants also express appreciation for the acknowledgment of the claim of foreign priority as well as receipt of the certified copy of the priority document in Application No. 09/214,001.

**Drawings**

Applicants note that the drawings submitted with the application have not been accepted. objected to in the Office Action. Applicants therefore assume that all formality requirements have been complied with in connection with the submission of formal drawings.

**Response To Objection**

In response to the objection to claim 24, Applicants note that the claim has been amended to correct the spelling of "the" in accordance with the spelling that appears in the claim as allowed in the "479 patent.

**Discussion Of Interview**

Applicants express appreciation for the courtesies extended by Examiners Tran and Leung to Applicants' representative during an April 26, 2005 personal interview at the Patent and Trademark Office and further telephone conversations with Examiner Leung following the personal interview.

During the personal interview, the new matter rejection was discussed with the examiners, and Applicants' representative pointed to a number of locations in the originally filed specification and drawings as supporting Applicants' position that the subject matter does not constitute new matter. The examiners noted these portions of the specification and drawings, including portions noted on the Interview Summary. In particular, the examiners were referred to the disclosure at column 8, beginning at line 5, wherein it is disclosed that, "Through the method for preheating the raw material feed channel is not limited to specified one, another preheating method may be employed in which, for example, at least a portion of the raw material feed channel is held in contact with the surface of a least one of the reforming reaction unit, the shift reaction unit and the CO oxidation unit..." Also, the specification at column 15, first full paragraph, and paragraph 23, first full paragraph, were referenced to show embodiments wherein the water and raw material are fed into different pipes.

It was also noted that the specification utilizes the language "raw material supply path" and this path can be composed a raw material pipe 6a and steam pipe 6b. It was argued that one having ordinary skill in the art reading Applicants' originally filed disclosure would readily understand that Applicants' were in possession of preheating either or both of

the raw material and water on the CO oxidation unit when reviewing Applicants' originally filed disclosure including the portions of the specification noted above.

During the personal interview, the examiners indicated that additional time would be needed for them to review the specification before they would make any definite statement regarding the new matter issue. Moreover, the examiners indicated that they would check with another examiner as to whether a Supplemental Declaration would be needed to correct minor errors and errors caused by the Patent and Trademark Office in the printed patent.

Despite our arguments, during the further telephone conversations with Examiner Leung, the examiner indicated that the new matter rejection would be maintained. The examiner indicated that she would maintain the new matter rejection because it was her present opinion that the originally filed application does not show separate preheating of water and raw material at the CO oxidation unit. The Examiner asserted that despite the disclosure at column 8, and the separate supplies of water and raw material, there is no showing of raw material being preheated by itself. She also asserted that while water is shown as being preheated in a pipe this pipe is not on the CO oxidation unit.

### **Response to New Matter Objection And Rejection**

The Amendment filed November 26, 2003 is objected to under 35 U.S.C. 132 and claims 30-44 are rejected under 35 U.S.C. 112, first paragraph, because it is asserted that it is unclear where the limitation, "said CO oxidation unit including an outside surface, and

being arranged to be cooled by atmospheric, raw material or water cooling of the outside surface”, finds support in the original disclosure.

In this ground of objection/rejection, the Examiner contends that it is unclear where the “raw material or water cooling” is located in the specification or drawings. The Examiner contends that it appears that the raw material and water are supplied to the apparatus as a mixture, thereby causing the cooling of the outside surface of the CO oxidation unit to be conducted by a “raw material and water mixture cooling”. In particular, the Examiner points to Fig. 6 for a showing of “Raw material + Water” being introduced as a mixture via raw material supply path 6, on the outside surface of CO oxidation unit 4.

In response to these grounds of objection and rejection, Applicants respectfully submit that a review of Applicants’ originally filed disclosure readily indicates that Applicants’ were in possession of “said CO oxidation unit including an outside surface, and being arranged to be cooled by atmospheric, raw material or water cooling of the outside surface” at the time of filing their application so that the specification and claims are not properly objected to or rejected as containing new matter.

In particular, attention is directed to column 7, beginning at line 48 and continuing to column 8, line 17, wherein it is disclosed that (emphasis added):

In the reforming apparatus according to the present invention, it is preferable that at least a portion of a raw material feed channel for feeding the raw material and steam to the raw material reforming unit is arranged in a position in which the raw material and the steam are preheated by heat from the heat source of the raw material reforming unit (FIGS. 3 to 27).

That is, while the raw material reforming unit is fed with the raw material and steam which are in a state of mixture through the raw material feed channel, the capability of the raw material feed channel being preheated facilitates

generation of steam from water in the raw material feed channel and, therefore, water rather than steam can be supplied from a source of the raw material to the raw material feed channel. This dispenses with necessity of use of a separate steam generating apparatus and, consequently, a reforming system can be downscaled as a whole. Also, since the preheating of the raw material feed channel allows the raw material and steam to be heated to a temperature close to the temperature range required for the steam reformation, the reformation reaction in the raw material reforming unit can be immediately initiated in an early state of the raw material reforming unit without the temperature of a reformation catalyst therein being lowered.

Though the method for preheating the raw material feed channel is not limited to specified one, another preheating method may be employed in which, for example, at least a portion of the raw material feed channel is held in contact with the surface of at least one of the reforming reaction unit, the shift reaction unit and the CO oxidation unit (FIGS. 3 to 6, 8 to 24, and 26); at least a portion of the raw material feed channel is arranged at a position contactable with the burned exhaust gas from the heat source of the raw material reforming unit (FIG. 7); or at least a portion of the raw material feed channel is arranged at such a position that it can be directly heated by the heat source of the raw material reforming unit (FIGS. 25 and 27).

Thus, one having ordinary skill in the art reading this portion of Applicants' originally filed disclosure would readily understand that Applicants' were in possession at the time of filing the original application that water can be preheated to form steam. Moreover, that preheating can be accomplished by at least a portion of the raw material feed channel being held in contact with the surface the CO oxidation unit.

Still further, attention is directed to the '479 patent at column 15, first full paragraph, wherein it is disclosed that:

The reforming reaction unit 2 has a lower end fluid-connected with a raw material supply path 6. This raw material supply path 6 includes a raw material pipe 6a for the supply of only a reforming raw material therethrough and a steam pipe 6b for the supply of a steam (water) therethrough, both of said pipes 6a and 6b being joined together on their length. The steam pipe 6b has a portion disposed having been coiled around and in contact with the

outer periphery of the reforming reaction unit 2 so that it can be preheated by heat evolved from the reforming reaction unit 2.

Thus, one having ordinary skill in the art would readily ascertain that Applicants' have possession of the raw material supply path being composed of separate pipes for supply of raw material or water.

Still further, attention is directed to the '479 patent at column 23, first full paragraph, wherein it is disclosed that:

The reforming reaction unit 2 comprises a coiled pipe filled with a reforming catalyst and has an upper end portion led outwardly from the upper portion of the combustion chamber 1 and fluid-connected with a raw material supply path 6. This raw material supply path 6 includes a raw material pipe 6a for the supply of only a reforming raw material therethrough and a steam pipe 6b for the supply of a steam (water) therethrough, both of said pipes 6a and 6b being joined together on their length. The steam pipe 6b has a portion disposed having been coiled around and in contact with the outer periphery of the combustion chamber 1 so that it can be preheated by heat evolved from the combustion chamber 1. The reforming reaction unit 2 has a lower end portion fluid-connected with an upper end portion of the shift reaction unit 3 through a connection tube that is led outwardly from the upper portion of the combustion chamber 1 after having extended through a center region of the combustion chamber 1.

Thus, one having ordinary skill in the art would readily ascertain that Applicants' have possession of the raw material supply path being composed of separate pipes for supply of raw material or water.

Still further, attention is directed to Figs. 8-19, 21, 22, 23a, 23b, 2426, 27 a and 27b for various examples where at least portions of the raw material supply path can separately supply raw material or water.

Applicants respectfully submit that one having ordinary skill in the art would readily understand that raw material and water can be fed and preheated in

separate pipes, such as separate pipes 6a and 6b, and that these separate pipes can be in contact with the surface of the CO oxidation unit as disclosed at column 8, line 10.

Regarding new matter, the Examiner is reminded that the inquiry into whether the description requirement is met must be determined on a case-by-case basis and is a question of fact. *In re Wertheim*, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). A description as filed is presumed to be adequate, unless or until sufficient evidence or reasoning to the contrary has been presented by the examiner to rebut the presumption. *In re Marzocchi*, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). The examiner, therefore, must have a reasonable basis to challenge the adequacy of the written description. The examiner has the initial burden of presenting by a preponderance of evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims.

What is conventional or well known to one of ordinary skill in the art need not be disclosed in detail. *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d at 1384, 231 USPQ at 94. If a skilled artisan would have understood the inventor to be in possession of the claimed invention at the time of filing, even if every nuance of the claims is not explicitly described in the specification, then the adequate description requirement is met. See, e.g., *Vas-Cath*, 935 F.2d at 1563, 19 USPQ2d at 1116; *Martin v. Johnson*, 454 F.2d 746, 751, 172 USPQ 391, 395 (CCPA 1972) (stating "the description need not be in *ipsis verbis* [i.e., "in the same words"] to be sufficient").



In the instant situation, Applicants' originally filed disclosure readily indicates that Applicants' were in possession of "said CO oxidation unit including an outside surface, and being arranged to be cooled by atmospheric, raw material or water cooling of the outside surface" at the time of filing their application so that the specification and claims are not properly objected to or rejected as containing new matter.

Accordingly, the objection/rejection should be withdrawn.

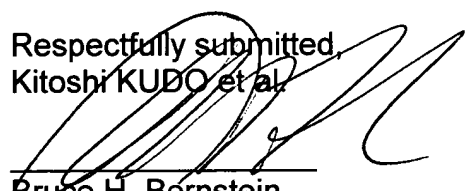
### CONCLUSION

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the objections and rejection of record, and allow each of the pending claims.

Applicants therefore respectfully request that an early indication of allowance of the application be indicated by the mailing of the Notices of Allowance and Allowability.

Should the Examiner have any questions regarding this Response, the this application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
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